U.S. EPA Environmental Science Center

701 Mapes Road
Fort George G. Meade, Maryland 20755-5350

Environmental Management System Manual

Control No.: ESC EM-01.02

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Issued by: The Environmental Management System Coordinator

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EnvironmentalScienceCenterEnvironmentalManagementSystem(EMS)Manual
TableofContents

1.0 EMS Scope

The U.S. EPA Environmental Science Center (ESC) environmental management system (EMS) is designed to manage the environmental impacts that result from the operations at the facility and, to a limited extent, off-site field activities. All of the operations conducted at the facility located at 701 Mapes Road, Fort George G. Meade (FGGM), Maryland are considered within the scope of the EMS. The activities of all of the occupants of the facility are subject to the policies and procedures described in this manual. The ESC EMS is designed to conform to the international standard ISO 14001 (1996), Environmental Management Systems - Specification With Guidance For Use.

2.0 Facility Description

The Environmental Science Center is approximately 167,000 gross square feet (89,000 net usable square feet) situated on approximately 24 acres. There are 75 laboratories with 93 fumehoods and 10 Biological Safety Cabinets. EPA Region III occupies approximately 59,000 square feet and includes the Analytical Services and Quality Assurance Branch, the Office of Enforcement, Compliance and Environmental Justice, and the Mid Atlantic Integrated Assessment Program. The EPA Headquarters Office of Prevention, Pesticides and Toxic Substances (OPPTS) occupies approximately 25,000 square feet of space. An additional 5,000 square feet is for shared building support. Also housed in the facility is the Baltimore Resident Office for the Office of Enforcement and Compliance Assurance (OECA), Criminal Investigation Division, DC Government. ESC building operations and environmental compliance activities are managed by Region III, Facilities Management and Services Branch on site staff. (See Appendix 2 for ESC Organization chart.)

At the Environmental Science Center, EPA scientists conduct tests on soil, air and water samples to determine the presence of pollutants and other contaminants. EPA microbiologists test drinking water to ensure its safety. Hospital disinfectants are tested to ensure the validity of their claims and chemists develop the analytical methods necessary to monitor pesticide residues in food. Science center staff also inspect and investigate manufacturing facilities, hazardous waste sites, and public and private labs.

3.0 EMS Policy Statement

The EMS policy statement documents the ESC's intentions and principles in relation to environmental performance and provides the framework for setting environmental performance goals. The statement is written and approved by the ESC Board. It is then signed and issued by EPA Region III Environmental Services Division Director , the EPA OPPTS Biological and Economic Analysis Division Director, and the EPA Region III Assistant Regional Administrator for Policy and Management. The members of the Board decide the content of the policy statement in consultation with the EMS Coordinator and the EMS Team. Drafts of the statement are sent to all occupants of the ESC for review and comment. Comments are considered by the Board and the EMS Team and incorporated into a final version as appropriate. Final versions of

the policy statement are issued by the Board to all ESC occupants primarily through e-mail. The EMS policy statement is reviewed with the staff during EMS awareness training sessions and during EMS management review meetings. The EMS Coordinator is responsible for maintaining records pertaining to the EMS Policy.

The EMS Policy is posted on the ESC EMS Web page:

http://www.epa.gov/region3/esc/ems/emspolicy.htm

The EMS Policy is provided to any outside party that requests it. *See Appendix 1 for the current ESC EMS Policy*.

4.0 EMS Planning

EMS planning activities determine the environmental aspects and impacts of the work conducted at the ESC. Environmental management programs are designed to control and reduce, where possible, the impacts associated with the identified aspects.

4.1 Determination of Significant Environmental Aspects

Environmental Aspect - Element of an organizations's activities, products or services that can interact with the environment (ISO 14001:1996)

Significant Environmental Aspects are determined through an open and participative process. The ESC staff are asked to list the facility activities that impact the environment. The EMS Team collects the ideas of the staff, adds additional ideas and then describes the specific impacts from the identified activities. The specific aspects of the activities that lead to environmental impacts are listed for each activity.

Impacts are analyzed by the EMS Team and given a rating for two conditions: likelihood of the impact occurring and magnitude of the impact should it occur. The descriptors "high", "medium", and "low" are used to describe both conditions. The EMS Team bases this analysis on the collective experience of the team members and, to a limited extent, on environmental performance data. The results of the impact analysis are then sorted by descriptor pairs in the following manor to determine those with the highest potential impact:

	High Significance	Medium Significance	Low Significance
Impact Descriptor Pairs - Likelihood and Magnitude	H, H M, H H, M	H, L M, M L, H	L, L M, L L, M

Those environmental aspects that have activities and related impacts that are described with the high significance descriptors, are considered significant aspects. There are three additional criteria that are used to determine significant aspects. The full list of significance criteria is below:

Environmental Aspect Significance Criteria
High significance descriptor
Legal or other requirement
Existing ESC program
Aggregate of impacts is significant and/or EMS Team determines need for significance

When the significance criteria are applied to the body of knowledge regarding activities, aspects, impacts, legal requirements, any inquiries received from external parties, and existing ESC programs, the result is the determination of significant aspects. The EMS Team has determined the following significant environmental aspects:

Significant Environmental Aspects
Air Emissions
Chemical Resources
Energy Consumption (Electricity)
Fuel Consumption (heating oil, natural gas)
Fuel Consumption (gasoline, diesel) and Emissions From Mobile Sources
Paper Consumption
Radiation
Storm water
Waste Generation
Wastewater
Water Consumption

Microbial Contamination and Noise were identified as aspects but did not meet the significance criteria.

The aspect analysis is reviewed by the EMS Team on a regular basis (at least annually) to ensure that the information is up-to-date and to determine whether the scope of significant aspects has changed. New developments and new or modified activities, products, and services are considered during the regular review.

4.2 Legal and Other Requirements

The legal and other requirements that apply to the EMS are a combination of federal and state statutes, federal executive orders, and internal EPA policies. Legal and other requirements are determined for each significant aspect. Environmental programs are in place to ensure that compliance is maintained for federal and state statutes and that progress toward significant compliance with federal executive orders, and internal EPA policies is achieved.

The registry of legal and other requirements is maintained and reviewed annually by the Safety, Health and Environmental Management (SHEM) Manager. While the line management of the ESC has ultimate responsibility for environmental compliance, the SHEM Manager has responsibility for conducting environmental compliance activities. The SHEM Manager relies on information gained through the network of national EPA SHEM Managers and other sources to ensure that the appropriate compliance requirements are identified. In addition, a tri-annual compliance audit is performed by EPA Headquarters' Safety, Health and Environmental Management Division with assistance from an independent contractor. Corrective actions are coordinated by the SHEM Manager based on the findings of the tri-annual audits. If necessary, the ESC Board, the Facility Manager and/or the SHEM Manager initiate and complete required corrective actions. The SHEM Manager is responsible for all records pertaining to environmental compliance.

4.3 Objectives and Targets

Environmental Objective - Overall environmental goal, arising from the environmental policy, that an organization sets itself to achieve, and which is quantified where practicable (ISO 14001:1996)

Environmental Target - Detailed performance requirement, quantified where practicable, applicable to the organization or parts thereof, that arises from the environmental objectives and that needs to be set and met in order to achieve those objectives (ISO 14001:1996)

The EMS team constructs objectives and targets for each significant environmental aspect. Objectives and targets are developed while considering criteria such as whether there is an existing program that addresses the activities that contribute to that aspect, compliance issues, the availability of ESC-specific performance data, and the opinion of the EMS Team as to where the greatest environmental performance improvements can be

made. Draft Objectives and Targets (including a discussion of significant aspects) are presented during a briefing at the Ft. Meade Partner Commander Conference (group which represents the Ft. Meade Community). Any input received from the Partner Commanders is considered by the EMS Team for changes to the draft objectives and targets.

After finalizing draft objectives and targets, the EMS team constructs an estimate of the resources needed to achieve the targets. The objectives, targets, and target resource estimates are presented to the ESC Board for decisions regarding which targets to implement. The ESC board reviews the resource estimates and decides which targets to pursue considering the operational and resource constraints that exist at that time. After the decision is made regarding which targets will be pursued, the EMS Team is responsible for documenting existing programs that are in place to address targets and for launching any new initiatives that are expressed in the targets. The ESC uses volunteer workgroups and existing workgroups (e.g., Waste Committee and Chemical Resources Committee) in many instances to achieve targets. In general, the outputs (e.g., strategies, proposals) from EMS sub-workgroups are submitted to the EMS Team for review. The EMS Team presents recommendations developed by sub-workgroups to the ESC Board for decisions regarding implementation. The EMS Coordinator is responsible for records pertaining to objectives and targets.

4.4 Environmental Management Programs

Environmental management programs (EMPs) are in place for each significant environmental aspect. EMPs are designed to manage the activities that substantially contribute to the impacts of the significant aspects and to achieve EMS targets and objectives. At any given time the EMP is comprised of existing program components and/or new program components that will result from targets. The details of the EMPs including individual responsibilities and operational controls are documented in the EMP Forms. The EMS Coordinator is responsible for maintaining the EMP Forms

5.0 EMS Implementation and Operation

The planned EMS is implemented and operated through a responsibility structure that is agreed upon by the ESC Board.

5.1 Structure and Responsibility

The following individuals and groups have specific responsibilities within the structure of the EMS (see http://www.epa.gov/region3/esc/ems/ems_contact.htm for current list):

Individual/Group	Responsibilities
EMS Coordinator (or Co-coordinators)	Implement and maintain the EMS for continued conformance to ISO 14001. Reports to ESC Board.
EMS Team	Directly participate in the design and implementation/operation of the EMS.
Facility Manager	Facility operation and maintenance, energy management
SHEM Manager	Overall responsibility for environmental compliance.
EMS Internal Audit Group	Conduct internal audits to determine system conformance.
ESC Board	Final responsibility for environmental compliance and decisions regarding the allocation of EMS resources (i.e., Top Management).
Environmental Management Contractors	Assist as needed with EMS tasks.
ESC Supervisors	Ensure that staff are aware of and complying with EMS policies and procedures. Assist with completion of non-conformance corrective actions.
ESC Staff	Be familiar with EMS structure, points of contact, the policies and procedures contained in the EMS documents.

5.2 EMS Training

Several types of training are employed in the ESC EMS:

Type of EMS Training	Training Recipients	Training Purpose
EMS Implementation	EMS Implementation Team	Detailed EMS training
EMS Internal Audit	EMS Internal Audit Group	Planning and conducting internal EMS audits
EMS Awareness	All staff permanently stationed at the ESC	General EMS, Importance of conformance to EMS policy, Roles and Responsibilities, Targets and Objectives
EMS Procedure-specific	Those staff whose jobs are directly associated with EMS procedures	Roles and Responsibilities, potential consequences of departures from SOPs

5.3 EMS Awareness

Ongoing awareness of the EMS is achieved using several modes of communication. As described above, EMS Awareness sessions are conducted for all individuals whose duty station is the ESC. These sessions are designed to cover basic information about the general structure and purpose of EMSs, as well as specific information regarding the ESC EMS. All ESC staff are encouraged to participate by offering ideas to improve environmental performance (see Appendix 3 for the Environmental Science Center EMS Suggestion and Idea Form). Other forms of awareness communication include e-mail updates and posters that indicate EMS status. Posters and copies of EMS updates are placed in the area around the lobby and the main lunch room.

5.4 EMS Competence

The necessary competencies are described in the EMP Forms. In general, actual competencies are tested against required knowledge, skills, and abilities when an individual is hired for a given job. To the extent necessary, competencies are further developed through formal training and/or on-the-job training.

5.5 EMS Communications

Several modes of communication are used to communicate among the levels and functions of the ESC and other stakeholders up-to-date on EMS activities. These communications include:

Written EMS procedures
Training events
Newsletters
Posters
Management briefings
Meetings of EMS Team, EMS workgroups, Internal Auditor Group, ESC Board
Presentations at open meetings/conferences

Any written inquiries from external parties regarding environmental performance or other aspect of the EMS is forwarded to the EMS Coordinator. The EMS Coordinator is responsible for coordinating a response (e.g. in consultation with the SHEM and Facility managers). A documented response is provided to the external party in a timely manner.

The ESC facilities management team (i.e., Facility Manager, Deputy Facility Manager, SHEM Manager, on-site contractors) provides important communications regarding the environmental performance of the ESC facility systems and environmental programs. This is accomplished through periodic e-mail messages as well as posting of performance data and issuance of the ESC Office of Policy and Management Year End Report. It is the

responsibility of the EMS Coordinator to ensure that information is disseminated to EMS stakeholders.

5.6 System Documentation

The key EMS documents include:

EMS Document	Document Control Code	Document Purpose
EMS Manual*	ESC EM-##.*xx*	To describe the overall structure and function of the EMS
Environmental Management Program Forms*	ESC EMP-##.*xx*	To document the specific content of the EMS components relative to each identified significant aspect
Procedures*	ESC EP-##.*xx*	To standardize specific procedures to be followed
Suggestion and Idea Forms (see Appendix 3)	ESC SI-*xxx*	To receive suggestions and ideas to improve environmental performance
Corrective Action Forms (see Appendix 4)	ESC CA-*xxx*	To initiate a process of investigating the need for changes to EMS procedures
Audit Corrective Action Forms (see Appendix 5)	ESC AC-*xxx*	To initiate a process of investigating the need for changes to EMS procedures based on audit findings
Internal Audit Plans	ESC IAP-*xx*	To define audit scope, criteria and logistics
Records	no specific code	To document that the actions specified in the EMS Manual and EMS Programs are followed and that operational controls are effective

# Indicates particular document (EP-**01**.00)
x Indicates version number (EP-01.**00**)
* See EP-11.00 on how to handle these documents

A document control system is used to ensure that only the most recent versions of the EMS Manual and the EMS Procedures are available for reference. The electronic versions of current EMS documents are maintained on the ESC EMS website and on a local area network directory that is accessible to all ESC staff. The main folder is titled Environmental Management Systems. Sub-folders under the main folder are clearly labeled (e.g., EMS Procedures or EMS Manual). Electronic versions of obsolete

documents are marked as obsolete and the original hard copies are archived by the EMS Coordinator according to EPA record control procedures. Any hard copies made of controlled EMS documents shall be destroyed when obsolete.

All EMS documents are periodically reviewed by the EMS Team and other stakeholders. In general, the EMS Manual is written and revised by the EMS Team and offered for comment to the entire ESC. The EMP and Corrective Action Forms are constructed and maintained by the EMS Team. Documents are stored in file drawers and the ESC Records Rooms to protect them against damage, deterioration, and loss. The EMS Coordinator has overall responsibility for the control of EMS documents.

5.7 Operational Control

Operational controls are in place for those activities associated with identified significant environmental aspects. New operational controls can result from the completion of objectives and targets. Aspect-specific operational controls are listed on a specific form called the Operational Control Form (OCF). The OCFs are attached to the EMPs. Internal procedures and other relevant documents are listed on the OCFs. EPA staff, grantees, and on-site contractors are given explicit instructions on operational control procedures during meetings and training sessions. Training records specific to operational controls that are conducted by on-site contractors are maintained by the Project Officer that is responsible for the contract (e.g., O/M&R contractors, hazardous waste removal contractors, analytical services contractors). Training records specific to operational controls that are conducted by EPA staff or grantees are maintained by the SHEM Manager.

5.8 Emergency Preparedness and Response

Emergency preparedness and response procedures are documented in the Occupant Emergency Plan (OEP), Spill Prevention Control and Countermeasures Plan (SPCC), and the facility Chemical Hygiene Plan (CHP). Copies of the OEP, SPCC and the CHP are available in the ESC Library. All occupants of the ESC are provided with a hard copy of the OEP. The SPCC and the CHP are available to all staff on the local area network. Initial training on the OEP is provided by the SHEM Manager to all new employees and a record of this orientation is maintained in the SHEMD log book. Refresher training on laboratory OEP procedures is provided by the SHEM Manager during annual safety training. Responsibilities and procedures for environmental incidents are described in the OEP section titled “Hazardous Materials Spills” as well as the sections titled “Chemical Spill Control and Reporting ” and “Fire and Emergency Evacuation Plan” in the CHP. In addition the SPCC sections titled “SPCC Plan Elements” and “Spill Discovery And Notification” further describe the responsibilities and procedures for environmental incidents. The OEP and SPCC include emergency contact information and phone numbers. The OEP, SPCC, and the CHP are revised annually by the SHEM Manager.

Every quarter, the ESC conducts an evacuation drill according to EPA and FGGM requirements. While this is commonly referred to as a "fire drill", the emergency procedures used are the same as those for an environmental emergency and subsequent Haz-Mat response if the incident is severe enough. Additionally, every two years the ESC conducts a "mock spill exercise" with the FGGM Fire Department Haz-Mat Team. The objective of the exercise is to ensure that the emergency responders and ESC staff, grantees, and on-site contractors are familiar with the emergency preparedness and response procedures. Corrective actions are coordinated by the SHEM Manager and changes in procedures are documented in revisions to the OEP, SPCC and/or CHP.

6.0 Checking and Corrective Actions

The results of checks of the EMS are used to ensure that controls are operating properly and the EMS is functioning and continually improving.

6.1 Monitoring and Measuring

Monitoring and measuring of operations and activities relative to significant aspects is conducted primarily by the Facility Manager and the SHEM Manager with assistance from on-site contractors and other ESC staff. The procedures followed are documented in written work assignments to contractors. The records associated with monitoring and measuring as well as the calibration of monitoring equipment are specified on the EMPs and OCFs and are maintained in the files of the Facility Manager and the SHEM Manager.

6.2 Nonconformance and Corrective and Preventive Action

When nonconformances are detected, corrective action is initiated by the SHEM Manager, the Facility Manager or the EMS Coordinator. EMS system-level corrective actions are the responsibility of the EMS Coordinator and are tracked using the ESC EMS Corrective Action Form (see Appendix 4). When the SHEM or Facility Manager detects the need for corrective action, they initiate and document the corrective action using work assignments, written procedures, workgroup meetings and/or training. The EMS Team provides recommendations to the ESC Board for corrective actions. The supervisors and/or the Facilities Management Team are responsible for coordinating completion of agreed corrective actions within their organizations.

Preventive actions are listed in the OCFs for each significant environmental aspect. Examples of preventive actions include alarm systems, regular inspections, maintenance of monitoring equipment, and environmental audits.

6.3 Records

The specific records associated with each significant environmental aspects are listed on

the EMP Forms including the location and the owner of each record. In general the EMS Coordinator maintains the system level EMS records (e.g., EMS policy, aspect analysis data, EMS Team meeting minutes) and the Facility and SHEM Managers maintain the facility level records (e.g., building performance data, facility O&M contractor training). The disposition of EMS records follows the EPA record control policies.

6.4 Systems Audits

Systems audits are used to ensure conformance to ISO 14001:1996 and to identify continual improvement opportunities. Two types of EMS audits are conducted at the ESC: internal and external third-party surveillance audits. Internal EMS audits shall be conducted on at least an annual basis in order to verify that the system is implemented and functioning. The scope of an internal EMS audit is to determine whether or not the environmental management system conforms to planned arrangements for environmental management including the requirements of ISO 14001; has been properly implemented, maintained and is functional; and allows for identification and compliance with legal requirements applicable to identified environmental aspects. Internal audits are conducted by staff of the ESC and EPA staff from HQ and Region III. Internal auditors receive formal EMS audit training. The internal audit program is based on ISO 19011:2002, *Guidelines on Quality and/or Environmental Management Systems Auditing*. The EMS Coordinator is responsible for forming the internal audit group and ensuring the auditors receive training. An Audit Team Leader is identified. The Team Leader is responsible for drafting an audit plan and submitting it to the EMS Coordinator. The audit plan specifies the logistics, scope, objectives and criteria for the audit. The Audit Team conducts the audit and submits a written report to the EMS Team. The EMS Team reviews the report and constructs a corrective action response by filling out the EMS Audit Corrective Action Form (see Appendix 5), which includes recommendations and resource estimates for corrective actions. The corrective action response is presented to the ESC Board by the EMS Coordinator for consideration and implementation decisions. It is the responsibility of the EMS Coordinator and the EMS Team to ensure that needed corrective actions are completed prior to the next internal audit.

The ESC will employ a third party auditor (Registrar) to determine conformance of the EMS to ISO 14001:1996. A Registrar approved by the American National Standards Institute Registrar Accreditation Board is retained under contract. Similar to internal audits, it is the responsibility of the EMS Coordinator and the EMS Team to ensure that corrective actions are completed and documented through changes to EMS documents and that any new procedures are communicated to the appropriate individuals.

All audit plans, audit reports and corrective action plans are retained as EMS records.

7.0 Management Review

Planned formal reviews of the EMS are conducted by the ESC Board at least once per calendar

year. During these reviews the EMS Coordinator and the EMS Team provide the ESC Board with information on performance of the EMS and it's ability to meet the commitments stated in the ESC EMS Policy. The EMS Coordinator provides data on progress toward meeting targets and objectives. The Facilities Management Team is responsible for compiling performance data for the review (e.g., energy consumption, recycling data, waste management). The results of the management review including any needed changes to policy, procedures, and/or resource allocation are documented in meeting minutes and subsequent changes to EMS documents. In addition, the EMS Coordinator provides EMS updates during quarterly ESC Board meetings to maintain an ongoing awareness.

Appendix 1 U.S. EPA Environmental Science Center Environmental Management Policy

U.S. EPA Environmental Science Center
Environmental Management Policy

It is the Environmental Science Center's policy to integrate environmental stewardship into our operations. We will manage our organizations and our programs in a manner that protects the environment, the safety of our employees, and public health.

In support of this policy, the ESC organizations make the following pledge:

To comply fully with the letter and spirit of all Federal, State, and local environmental laws and regulations.

We have persons specifically designated as the facility's manager; the facility safety, health and environmental manager; and the coordinator for the environmental management system. These staff will remain current and will assure compliance with applicable laws and regulations for the entire facility.

- *We will assure that all appropriate staff members will remain current on all applicable laws and regulations.*

To consider environmental factors when making planning, purchasing, and operating decisions.

- *We will adopt cost-effective practices that eliminate, minimize or mitigate environmental impacts and we will use environmentally preferred materials if those materials meet technical specifications .*

To work continuously to improve the effectiveness of our environmental management programs.

- *We will establish appropriate environmental objectives and performance indicators to guide these efforts and measure our progress.*

To provide appropriate training and educate employees to be environmentally responsible on the job.

- *We will use a variety of training and communication tools to educate our employees about this environmental management system and how to apply its policies and principles to our everyday work.*

To monitor our environmental performance regularly through rigorous evaluations.

- *We will conduct annual environmental performance reviews with top management.*
- *We will conduct other environmental reviews periodically as suggested by the Environmental Management System Team.*

To seek to prevent pollution before it is produced, reduce the amount of waste at our facility, re-use and recycle whenever possible, and support pollution prevention by our customers and suppliers.

- *We will participate in pollution prevention programs and develop related reports that can be shared within our facility and with others.*

To maintain and improve the grounds of the ESC in an environmentally sensitive manner including land, water, wildlife and natural resources.

- *We will continue to use such concepts as beneficial landscaping as we seek to enhance our surroundings and manage our environment.*

To use energy efficiently throughout our operations, and support the efficient use of gas and electricity in our facility.

- *We will use the building automation system to measure and manage our energy usage in the facility.*

To work cooperatively with the local community and other stakeholders to further common environmental objectives.

- *We will participate in Fort Meade and other community environmental activities, seeking out ways to share our environmental stewardship message.*

To communicate and reinforce this policy throughout our organizations.

- *We will develop communications strategies that are designed to ensure that employees and others who use our facilities have an appropriate understanding of the environmental management policy.*
- *We will share our environmental management successes and progress with all organizations at the ESC.*

In addition to our annual review of ESC's progress on environmental goals and adherence to this policy, we invite interested parties to provide us with input on this policy.

_____ _____

Kathy Hodgkiss, Acting Director, EPA Region III Environmental Services Division — Date

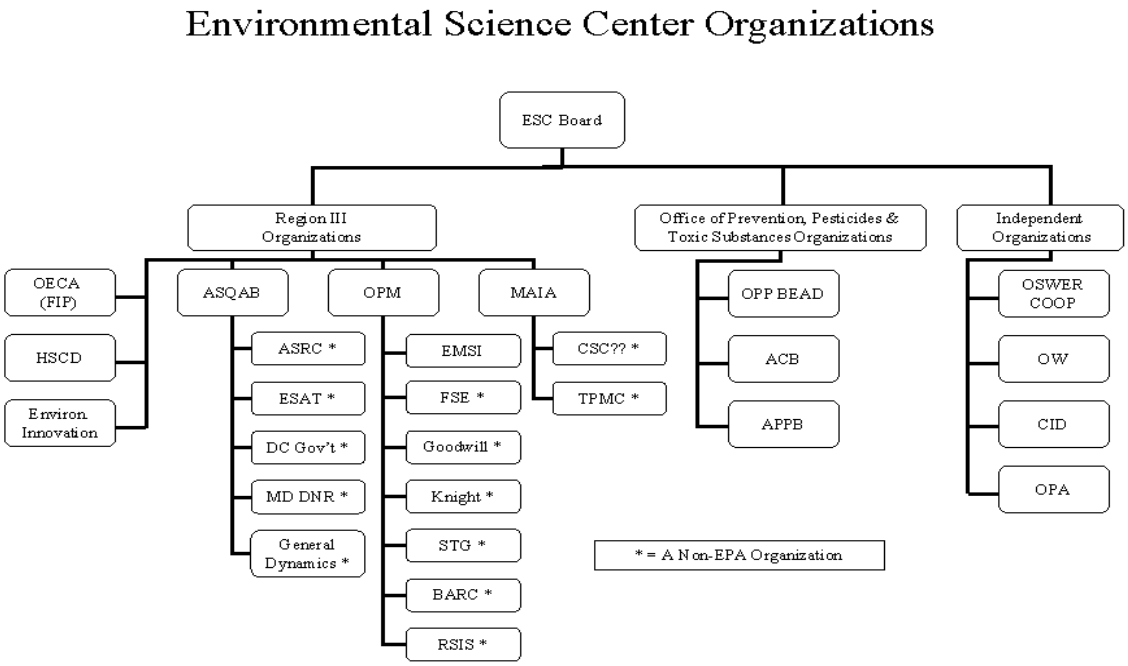
_____ _____

Denise Keehner, Director, EPA Biological and Economic Analysis Division, Office of Pesticide Programs — Date

_____ _____

Jim Newsom, EPA Region III Assistant Regional Administrator for Policy and Management — Date

Appendix 2 Environmental Science Center Organization Chart



Appendix 3 Environmental Science Center EMS Suggestion and Idea Form

Environmental Science Center EMS Suggestion and Idea Form

Suggestion and Idea Control Number: ESC SI-	
Completed by:	**Date recorded:**
Suggestion / Idea (include cost information where appropriate):	
The rest of the form can be filled out by the EMS Team	
Activities Involved:	
Aspects Involved:	
Will an action plan be developed by the EMS Team ☐ Yes ☐ No If yes, complete below.	
Projected Date(s) for completion:	
Responsible Individuals:	
Actions Completed:	
Date(s) Completed:	

Appendix 4 Environmental Science Center EMS Corrective Action Form

Environmental Science Center EMS Corrective Action Form

Corrective Action Control Number: ESC CA-	
Completed by:	**Date recorded:**
Observed Nonconformance:	
Cause of Nonconformance:	
Corrective Action Needed:	
Projected Date(s) for completion:	
Responsible Individuals:	
Corrective Actions Completed:	
Date(s) Completed:	
Completion Determined by:	**Date:**

Appendix 5 Environmental Science Center EMS Audit Corrective Action Form

EMS Audit Corrective Action Form

Environmental Science Center EMS Audit Corrective Action Form

Audit Type:

Document Control Number: ESC AC-xxx

Audit Date: _____

Form Completed by: _____

Auditors and Affiliation:_____

Status : _____

Audit Findings				
Observed nonconformance	**Cause of nonconformance**	**Corrective Action Needed and Date Completed**	**Responsible Person/Group**	**Objective Evidence**

Appendix 6 Glossary of Terms

ASQAB	Analytical Services and Quality Assurance Branch
CHP	Chemical Hygiene Plan
EMP	Environmental Management Programs
EMS	Environmental Management System
EPA	U.S. Environmental Protection Agency
ESC	Environmental Science Center
FGGM	Fort George G. Meade
HQ	Headquarters
ISO	International Organization for Standardization
O&M	Operations and Maintenance
OCF	Operational Control Form
OECA	Office of Enforcement and Compliance Assurance
OEP	Occupant Emergency Plan
OPM	Office of Policy and Management
OPPTS	Office of Prevention, Pesticides and Toxic Substances
SHEM	Safety, Health and Environmental Management
SHEMD	Safety, Health and Environmental Management Division
SOP	Standard Operating Procedure
SPCC	Spill Prevention Control and Countermeasures Plan